

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented) A control device for controlling a system, comprising:
 - a plurality of activatable modules, each of the activatable modules having a respective corresponding priority value;
 - a scheduler activating the activatable modules as a function of the respective corresponding priority value of each of the activatable modules to provide activated modules, the activated modules generating data by analyzing states of the system; and
 - a priority manager continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules.
2. (Currently Amended) ~~[[The]]~~ A control device according to claim 1 for controlling a system, comprising:
 - a plurality of activatable modules, each of the activatable modules having a respective corresponding priority value;
 - a scheduler activating the activatable modules as a function of the respective corresponding priority value of each of the activatable modules to provide activated modules, the activated modules generating data by analyzing states of the system; and
 - a priority manager continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules,

wherein the priority manager modifies the respective corresponding priority value of a particular module of the activatable modules as a function of a time period in which the particular module is one of activated and deactivated.
3. (Previously presented) The control device according to claim 1, wherein the priority manager modifies the respective corresponding priorities of activatable modules as a function of the states of the system.

4. (Currently Amended) ~~[[The]]~~ A control device according to claim 1 for controlling a system, comprising:

a plurality of activatable modules, each of the activatable modules having a respective corresponding priority value;

a scheduler activating the activatable modules as a function of the respective corresponding priority value of each of the activatable modules to provide activated modules, the activated modules generating data by analyzing states of the system; and

a priority manager continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules,

wherein the priority manager modifies the respective corresponding priority value of a particular module of the activatable modules as a function of the states of the system and a time period during which the particular module is one of activated and deactivated.

5. (Currently Amended) ~~[[The]]~~ A control device according to claim 1 for controlling a system, comprising:

a plurality of activatable modules, each of the activatable modules having a respective corresponding priority value;

a scheduler activating the activatable modules as a function of the respective corresponding priority value of each of the activatable modules to provide activated modules, the activated modules generating data by analyzing states of the system; and

a priority manager continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules,

wherein the priority manager modifies the respective corresponding priority value of a particular module of the activatable modules as a function of an activation message which indicates that the particular module has been activated.

6. (Previously presented) The control device according to claim 5, wherein the priority manager modifies the respective corresponding priority value of the particular module as a further function of a corresponding deactivation message.

7. (Currently Amended) ~~[[The]]~~ A control device according to claim 1 for controlling a system, comprising:

a plurality of activatable modules, each of the activatable modules having a respective corresponding priority value;

a scheduler activating the activatable modules as a function of the respective corresponding priority value of each of the activatable modules to provide activated modules, the activated modules generating data by analyzing states of the system; and

a priority manager continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules,

wherein the priority manager modifies the respective corresponding priority value of a particular module of the activatable modules as a function of absolute time signals.

8. (Previously presented) A control device for controlling a system, comprising:

a plurality of activatable modules, each of the activatable modules having a respective corresponding priority value;

a scheduler activating the activatable modules as a function of the corresponding priority value of each of the activatable modules to provide activated modules, the activated modules generating data by analyzing states of the system; and

a priority manager continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules;

wherein the scheduler selects a first module having a highest priority for an activation, the first module being selected from a set of the activatable modules awaiting the activation,

wherein the scheduler assembles a residual set of the activatable modules from the set of the activatable modules, the residual set excluding the first module and excluding second modules, the second modules being those of the activatable modules which must not be activated simultaneously with the first module, and

wherein the scheduler selects third modules from the residual set of the activatable modules for the activation.

9. (Previously presented) The control device according to claim 8,
wherein the scheduler repeatedly selects an additional one of the activatable modules for the activation, each additional one having a respective highest priority,
wherein the scheduler assembles the residual set of the activatable modules which exclude modules already selected for the activation and excludes fourth modules which must not be activated simultaneously with the modules already selected for the activation, and
wherein the scheduler continues to repeatedly select modules and to assemble the residual set until the residual set does not contain any of the activatable modules.
10. (Previously presented) The control device according to claim 8, wherein, after the scheduler selects the modules, the scheduler verifies that the selected modules are activated and unselected modules of the activatable modules are not activated.
11. (Previously Presented) The control device according to claim 8, wherein the system includes one of a motor vehicle, an engine and a transmission.
12. (Previously presented) A method for operating a control device which controls a system, the control device including a plurality of activatable modules, the method comprising the steps of:
assigning a respective corresponding priority value to each of the activatable modules;
activating the activatable modules as a function of the respective corresponding priority value of each of the activatable modules to provide activated modules;
with the activated modules, generating data by observing states of the system; and
continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules.
13. (Currently Amended) [[The]] A method according to claim 12 for operating a control device which controls a system, the control device including a plurality of activatable modules, the method comprising the steps of:
assigning a respective corresponding priority value to each of the activatable modules;
activating the activatable modules as a function of the respective corresponding priority value of each of the activatable modules to provide activated modules;

with the activated modules, generating data by observing states of the system; and
continuously modifying the respective corresponding priority value of each of at least
one of the activatable modules individually to one of increase and decrease the respective
corresponding priority value relative to the priority value of another of the activatable
modules,

wherein the respective corresponding priority value of a particular module of the activatable modules is modified as a function of a time period during which the particular module is one of activated and deactivated.

14. (Previously presented) The method according to claim 12, wherein the respective corresponding priority value of a particular module of the activatable modules is modified as a function of the states of the system.

15. (Currently Amended) ~~[[The]]~~ A method according to claim 12 for operating a control device which controls a system, the control device including a plurality of activatable modules, the method comprising the steps of:

assigning a respective corresponding priority value to each of the activatable modules;
activating the activatable modules as a function of the respective corresponding
priority value of each of the activatable modules to provide activated modules;
with the activated modules, generating data by observing states of the system; and
continuously modifying the respective corresponding priority value of each of at least
one of the activatable modules individually to one of increase and decrease the respective
corresponding priority value relative to the priority value of another of the activatable
modules,

wherein the respective corresponding priority value of a particular module of the activatable modules is modified as a function of the states of the system and a time period during which the particular module is one of activated and deactivated.

16. (Currently Amended) ~~[[The]]~~ A method according to claim 12 for operating a control device which controls a system, the control device including a plurality of activatable modules, the method comprising the steps of:

assigning a respective corresponding priority value to each of the activatable modules;
activating the activatable modules as a function of the respective corresponding
priority value of each of the activatable modules to provide activated modules;
with the activated modules, generating data by observing states of the system; and

continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules,

wherein the respective corresponding priority value of a particular module of the activatable modules is modified as a function of an absolute time signal.

17. (Previously Presented) A method for operating a control device which controls a system, the control device including a plurality of activatable modules, the method comprising the steps of:

- assigning a respective corresponding priority value to each of the activatable modules;
- activating the activatable modules as a function of the respective corresponding priority value of each of the activatable modules to provide activated modules;
- with the activated modules, generating data by observing states of the system;
- continuously modifying the respective corresponding priority value of each of at least one of the activatable modules individually to one of increase and decrease the respective corresponding priority value relative to the priority value of another of the activatable modules;

- before the activating step, selecting a first module having a highest priority for an activation, the first module being selected from a set of the activatable modules awaiting the activation;

- assembling a residual set of the activatable modules from the set of the activatable modules, the residual set excluding the first module and excluding second modules, the second modules being those of the activatable modules which must not be activated together with the first module; and

- selecting third modules from the residual set of the activatable modules for the activation.

18. (Previously presented) The method according to claim 17, further comprising the steps of:

- before the activating step, selecting another of the activatable modules for the activation, the selected module having a respective highest priority; and

- assembling the residual set of the activatable modules which exclude modules already selected for the activation and excluding fifth modules which must not run simultaneously

with the selected modules, wherein modules are selected and the residual set is assembled until the residual set does not contain any of the activatable modules.

19. (Previously presented) The method according to claim 17, further comprising the step of:

after the modules are selected, verifying that the selected modules are activated and unselected modules of the activatable modules are not activated, wherein the selected modules are not activated until still-activated modules of the activatable modules, with which the selected modules must not run simultaneously, have been deactivated.

20. (Previously Presented) The method according to claim 17, wherein the system includes one of a motor vehicle, an engine and a transmission.